

REMARKS

Claim 2 stands rejected under 35 U.S.C. § 102(b) as being anticipated by the abstract of JP 5-101933. Applicant respectfully traverses this rejection.

Applicant respectfully submits that JP 5-101933 fails to disclose all of the features of the present invention. Specifically, JP 5-101933 fails to disclose a magnetic recording medium that includes, *inter alia*, a magnetic recording layer consisting of a CoCr based alloy “including Cr in the concentration of less than 5at%,” as defined in independent Claim 2.

JP 5-101933 discloses the use of a magnetic layer with a Cr concentration of at least 5at% (more specifically, of between 5 and 15at%). In contrast, Claim 2 defines a magnetic layer of less than 5at%. Applicant believes that JP 5-101933 teaches against Cr concentrations of less than 5at% due to reductions in corrosion resistance. In contrast, in the present invention defined in Claim 2, Cr is limited to the extremely small value of less than 5at% to avoid lowering the value of the anisotropic constant Ku. Thus, the concepts behind selecting the atomic percentage of Cr in the present invention differ from those used in JP 5-101933 (and therefore the atomic percentage values of Cr are different). Accordingly, since all of the features of Claim 2 are not disclosed in JP 5-101933, Applicant respectfully requests the withdrawal of this §102(b) rejection.

Claims 12 and 13 stand rejected under 35 U.S.C. § 102(e) as being anticipated by United States Patent No. 5,989,728 to Coffey et al. Claim 13 has been cancelled, without

prejudice, thereby rendering this rejection moot with respect to this claim. However, with respect to Claim 12, Applicant respectfully traverses this rejection.

Applicant respectfully submits that the Coffey et al. reference fails to disclose all of the features defined in Claim 12. More specifically, the Coffey et al. reference fails to disclose a method of manufacturing a magnetic recording medium that includes, *inter alia*, a post-annealing step used to “diffuse Cr from said underlayer into said magnetic layer such that Cr is present only at the crystal grain boundaries of said alloy,” as defined in independent Claim 12. In contrast, the Coffey et al. fails to even mention diffusing Cr so that it is present only at the crystal grain boundaries of the alloy of the magnetic layer. Accordingly, as all of the features of Claim 12 are not disclosed in the Coffey et al. reference, Applicant respectfully requests the withdrawal of this §102(e) rejection of Claim 12.

Claims 2 and 10 stand rejected under 35 U.S.C. § 103 as being unpatentable over United States Patent No. 4,774,130 to Endo et al. Applicant respectfully traverses this rejection.

Applicant respectfully submits all of the features of the present invention are not disclosed or suggested in the Endo et al. reference. Specifically, the Endo et al. reference fails to disclose or suggest a magnetic recording medium that includes, *inter alia*, a magnetic layer consisting of a CoCr based alloy “including Cr in the concentration of less than 5at%” as defined in independent Claim 2.

The Endo et al. reference discloses the use of a magnetic layer with a Cr concentration of at least 5at% (more specifically, of between 5 and 20at%). In contrast, as discussed above, Claim 2 defines a magnetic layer of less than 5at%. The Endo et al. reference also discloses the use of an underlayer that may be made of Cr (col. 4. line 67 through col. 5, line 4). However, the Endo et al. reference fails to disclose or suggest that the Cr underlayer is diffused into the magnetic layer (which, in the present invention, is how the extremely small value of less than 5at% of Cr is obtained). Instead, the Cr underlayer is disclosed as being used for increasing the adhesion strength of the magnetic layer. In contrast, in the present invention defined in Claim 2, Cr is limited to the extremely small value of less than 5at% to avoid lowering the value of the anisotropic constant Ku. Thus, because the rationale for using Cr in the underlayer of the present invention differs from that of Endo et al., there is no suggestion for reducing the amount of Cr present in the magnetic layer so that it is less than 5at%. Accordingly, since all of the features of Claim 2 are not disclosed or suggested in the Endo et al. reference, Applicant respectfully requests the withdrawal of this §103 rejection.

Claim 14 stands rejected under 35 U.S.C. §103 as being unpatentable over United States Patent No. 5,989,728 to Coffey et al. in view of United States Patent No. 5,939,202 to Ataka et al. Applicant respectfully traverses this rejection.

Claim 14 depends from independent Claim 12, and therefore includes all of the features of Claim 12, plus additional features. Accordingly, Applicant respectfully requests

that this §103 rejection of dependent Claim 14 be withdrawn considering the above remarks directed to independent Claim 12, and also because the Ataka et al. reference does not remedy the deficiencies noted above, nor was it relied upon as such.

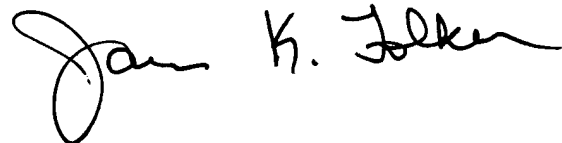
Finally, Applicant has also added new dependent Claim 15. Applicant respectfully submits that new Claims 12-14 are allowable.

For all of the above reasons, Applicant requests reconsideration and allowance of the claimed invention. Should the Examiner be of the opinion that a telephone conference would aid in the prosecution of the application, or that outstanding issues exist, the Examiner is invited to contact the undersigned.

Respectfully submitted,

GREER, BURNS & CRAIN, LTD.

By



James K. Folker
Registration No. 37,538

November 25, 2003

Suite 2500
300 South Wacker Drive
Chicago, Illinois 60606
Telephone: (312) 360-0080
Facsimile: (312) 360-9315

Customer No. 24978
K:\0671\66045\amd-c.doc